

REMARKS

Claims 1 – 26 are pending. Claims 1, 6, 12, 17, 21, 22, and 25 have been amended. No new matter has been added. Reexamination and reconsideration of the present application are respectfully requested.

Claim 1 as amended is directed to the use of local IP addresses that are not directly accessible to devices on an external network. This is distinguished from *public* addresses in *public* networks. As described in the Applicant's specification, local IP addresses are unique only within the local network, and are not known or directly accessible to outside devices. Dynamic Host Configuration Protocol (DHCP) facilitates the use of local addresses by assigning a local IP address to a device on the local network. Each time a local device is powered down and then powered back up, DHCP can assign an IP address that need not necessarily be identical to the previous IP address. DHCP also maintains a table in which the local IP address is associated with a symbolic name of the device. Because the local network is kept "hidden from the outside world," a special packet device with a public IP address uses network address translation (NAT) to direct outside traffic to devices on the local network.

The advantage of using local IP addresses is that a single public IP address may be used to represent an entire group of computers. This simplifies communication from the perspective of devices outside the local network. Traffic is directed to the public IP address of the packet device rather than to the local IP address of devices inside the local network. Local IP addresses can thereby be assigned dynamically without the need to update public IP addresses repositories such as DNS servers. Local IP addresses are also more secure than public IP addresses. The local addresses are not known to external devices, and intermediate devices (such as the packet device in claim

1, as amended), can serve as a firewall that protects the local network from external threats.

**Independent claim 1**, as amended, recites:

A system for using Dynamic Host Configuration Protocol (DHCP) address assignments to determine a local destination address of a received packet in a Network Address Translation (NAT) environment, the system comprising:

a DHCP server to assign local Internet Protocol (IP) addresses to devices on a local network;

**a remote network, wherein the local IP addresses on the local network are not directly accessible to devices on the remote network;**

a NAT device to execute network address translation translate addresses from the remote network to the local network;

a packet device to receive packets from the remote network; and

**an addressing device to determine the local destination address of the packets received by the packet device, wherein the addressing device uses an association table created from symbolic names of the devices on the local network and the local IP addresses associated with the devices.**

Applicant respectfully submits that the DNS server described in *Davies* does not contain mappings between hostnames and local IP addresses, as recited in claim 1, as amended. In contrast, *Davies* is directed to *public* IP addresses. Unlike local IP addresses, public IP addresses are directly accessible from anywhere on the network. While *Davies* describes the use of a DNS server to translate symbolic names into an IP address on a LAN (col. 1, lines 61-64), these LAN IP addresses cannot be **local IP**

**addresses** as recited in claim 1, as amended, because they are directly accessible from clients anywhere on the network. For example, *Davies* describes a public IP address shared between a group of servers such that the “plurality of servers collectively appear as one virtual (i.e. logical) server to clients.” (*Davies*, col. 2, lines 31-36). This IP address is assigned directly to the servers, and traffic is directed to this IP address as opposed to some other intermediate device. (*Davies*, col. 2, lines 31-36). Traffic can only be sent directly to the shared IP address if this address is accessible to clients on the public network. Moreover, IP traffic is sent to servers “automatically ... as a result of existing protocols of the IP protocol suite...” (*Davies*, col. 2, lines 60-64). That is, IP traffic is automatically delivered to public IP addresses without translation from public to local addresses through an intermediate device. It is apparent, then, that the DNS table cited by the Examiner in *Davies* contains a mapping between hostnames and *public* IP addresses.

Thus, applicant respectfully submits that *Davies* does not disclose a remote network, wherein **local IP addresses on the local network are not directly accessible to devices on the remote network**, as recited in independent claim 1, as amended. *Davies* discloses LAN IP addresses that are directly accessible from anywhere on the network. Furthermore, *Davies* does not disclose an addressing device to determine the **local destination address** of the packets received by the packet device, wherein the addressing device uses an association table containing **local IP addresses**, as recited in independent claim 1, as amended. As discussed above, *Davies* discloses a mapping table containing *public* IP addresses. Thus, Applicant respectfully submits that claim 1, as amended, distinguishes over *Davies* in combination with *Leung*.

Independent claims 6, 12, 17, and 21 recite limitations similar to claim 1, as amended. Accordingly, applicant respectfully submits that independent claims 6, 12, 17, and 21 distinguish over the combination of *Leung* and *Davies* for reasons similar to those discussed above in regard to independent claim 1, as amended.

Dependent claims 2-5, 7-11, 13-16, 18-20, and 22-26 depend, directly or indirectly, upon independents claims 1, 6, 12, 17, and 21, respectively. Accordingly, applicant respectfully submits that dependent claims 2-5, 7-11, 13-16, 18-20, and 22-26 distinguish over the combination of *Leung* and *Davies* for reasons similar to those discussed above in regard to independent claim 1, as amended.

///

///

///

///

///

///

///

///

///

///

///

///

///

///

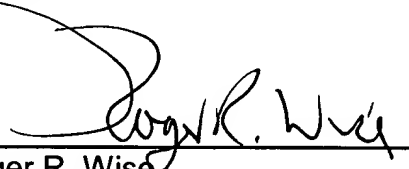
///

Applicant believes that the foregoing remarks place the application in condition for allowance, and a favorable action is respectfully requested. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call either of the undersigned attorneys at the Los Angeles telephone number (213) 488-7100 to discuss the steps necessary for placing the application in condition for allowance should the Examiner believe that such a telephone conference would advance prosecution of the application.


Respectfully submitted,

PILLSBURY WINTHROP LLP

Date: February 17, 2005

By:   
Roger R. Wise  
Registration No. 31,204  
Attorney for Applicant(s)

Date: February 17, 2005

By:   
Ryan E. Hatch  
Registration No. 55,252  
Attorney for Applicant(s)

725 South Figueroa Street, Suite 2800  
Los Angeles, CA 90017-5406  
Telephone: (213) 488-7100  
Facsimile: (213) 629-1033